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L10 ANSWER 14 OF 17 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 1996-131194 [14] WPIDS
DNC C1996-040969
TI Centaurium erythraea extract compsns. - obtd. by soaking in e.g. polyethylene fatty alcohol ether(s), are useful as protease inhibitors, antiinflammatory and anti-ageing agents.
DC A94 B04 D21
IN FONTANEL, D; GREFF, D
PA (FONT-I) FONTANEL D; (SEDE-N) SEDERMA SA
CYC 1
PI FR 2723313 A1 19960209 (199614)* 12p
ADT FR 2723313 A1 FR 1994-9678 19940802
PRAI FR 1994-9678 19940802
AN 1996-131194 [14] WPIDS
AB FR 2723313 A UPAB: 19960405
Cosmetic and dermopharmaceutical compositions containing an extract of Centaurium, especially Centaurium erythraea (I) are new.

The whole, aerial or flowering parts of the fresh or dried plant are extracted pref. by known methods (e.g. by refluxing, or ultrasound or microwave treatment) using a 1-4C alcohol, a ketone, ether and/or an aliphatic or cyclic alkane. Preferred solvents are fatty alcohols or their esters, or polyethylene or polypropylene glycol ethers. The extract may pref. be used in liquid or dried form and comprises 0.5 - 10 weight % of the compsn. which is in the form of e.g. oil-in-water and water-in-oil emulsions, lotions, gels or ointments The extracts may be incorporated into cosmetic vehicles such as **liposomes**, macro-, micro and nanoparticles.

USE - The compsns. possess anti-inflammatory, protease inhibitory and anti-radical activity, as well as calming and anti-ageing properties. The compsns. are used to prevent wrinkles and to hydrate and smooth the scalp, hair or skin with acne. They promote cutaneous cell renewal and protect against hair loss (all claimed).

ADVANTAGE - Extracting with fatty esters and their polyethylene glycol derivs. enables **ursolic acid**, the active component, to be solubilised without the need for further purification and the risk of residual solvent being incorporated into the compsn.
Dwg.0/0

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L15 ANSWER 5 OF 43 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:798598 CAPLUS
DN 123:208694
TI Liposome formation in microgravity
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CS Department Anatomy and Physiology, Kansas State University, Manhattan, KS, USA
SO Advances in Space Research (1996), 17(6/7, Life and Gravity: Physiological and Morphological Responses), 151-60
CODEN: ASRSDW; ISSN: 0273-1177
PB Elsevier
DT Journal
LA English
AB **Liposomes** are artificial vesicles with a **phospholipid bilayer membrane**. The formation of liposomes is a self-assembly process that is driven by the amphipathic nature of phospholipid mols. and can be observed during the removal of detergent from phospholipids dissolved in detergent micelles. As detergent concentration in the mixed micelles decreases, the non-polar tail regions of produce a hydrophobic effect that drives the micelles to fuse and form planar bilayers in which phospholipids orient with tail regions to the center of the bilayer and polar head regions to the external surface. Remaining detergent mols. shield exposed edges of the bilayer sheet from the aqueous environment. Further removal of detergent leads to intramembrane folding and membrane vesiculation, forming liposomes. We have observed that the formation of liposomes is altered in microgravity. Liposomes that were formed at 1-g did not exceed 150 nm in diameter, whereas liposomes that were during spaceflight exhibited diams. up to 2000 nm. Using detergent-stabilized planar bilayers, we determined that the stage of liposome formation most influenced by gravity is membrane vesiculation. In addition, we found that small, equipment-induced fluid disturbances increased vesiculation and negated the size-enhancing effects of microgravity. However, these small disturbances had no effect on liposome size at 1-g, likely due to the presence of gravity-induced buoyancy-driven fluid flows (e.g., convection currents). Our results indicate that fluid disturbances, induced by gravity, influence the vesiculation of membranes and limit the diameter of forming liposomes.